

COMPLETE SAMPLE DELIVERY GROUP FILE (CSF) EVIDENCE AUDIT CHECKLIST (EAC) U.S. Environmental Protection Agency

U.S. Environmental Protection Agency Region 8 Superfund Program Contract Laboratory Program (CLP)



• • • • • • • • • • • • • • • • • • • •		Route to Validation (-
Case Number: 37402	SDG Number:	MHZSC5		
	AUDIT CHECKLIST			
Note: The following items are verified for each Reg the Region 8 Inspection of Complete Sample completed on approximately 10% of the Reg "N/A" is marked.	Delivery Group SOP, the items identified	ed as "Complete Audit	Only" are	
CHAIN OF CUSTODY				•
Custody Seal Present?		Yes	No	
2. Condition of Seal?	Intact X Signed X E	Broken Ur	nsigned	
3. Chain of Custody Record(s)/Traffic Repo	orts Present?	Yes_X_	No	
4. Chain of Custody Record(s)/Traffic Repo	orts Signed?	Yes_X	No	
5. Chain of Custody Record(s)/Traffic Repo	orts Dated?	Yes_X	No	
6. Airbill Present?		Yes	No_X	
7. Airbill Number(s)?		· .	, -	
8. Airbill Signed?		Yes <u>ma</u>	- No	
9. Airbill Dated?		Yes mo	No	
10. Sample Tags Present?	• .	Yes	No_X_	
11. Sample Tags Match DC-1 (Complete A	udit Only)?	Yes	No	N/A <u>X</u>
FORM DC-1				
12. Form DC-1 Present?		Yes_X	No	
FORM DC-2			i : , , , , , , , , , , , , , , , , , , ,	
13. Form DC-2 Present?		Yes_X	No	
14. Form DC-2 Reviewed by USEPA and C	Correct (Complete Audit Only)?	Yes	No	N/A_X_

15. Laboratory Documents Legible (Complete Audit Only)? Yes 16. Original Documents Included in CSF (Complete Audit Only)? Yes No **DATA INSPECTION** Raw data present (for each analytical fraction defined by the traffic No report/chain of custody record)? Percent Solids Form present for soil samples? N/A Cover Page Present? 19. No **Records of Communication Present?** 20. 21. Form 1s present (for each analytical fraction defined by the traffic Yes No report/chain of custody record/cover page) (Complete Audit Only)? **ELECTRONIC DATA** Electronic DAT file elements received? 22. EDD Yes No N/A **CCS** Report N/A Yes No M/VS Report N/A No **Defect Code Report** N/A No 23. List RPM and contractors who received electronic DAT file: **COMMENTS:** Date: Audited By: (As defined in the Signature

(As defined in the Region 8 Inspection of Complete Sample Delivery Group SOP)

DOCUMENT CONTROL



SDG Administrative Narrative

F2								
Contract: EPW-06-C)59							
Case: 37402	· 							
SDG: MH25C5	·							
Set ID No.: 8171020	·							
Cooler # and temperatures of each (upon rec	eipt)							
Cooler Number C08- NA	Arrival temperature was°C							
Cooler Number C08	Arrival temperature was°C							
Cooler Number C08	Arrival temperature was°C							
Cooler Number C08	Arrival temperature was°C							
Cooler Number C08-	Arrival temperature was°C							
Cooler Number C08-	Arrival temperature was°C							
Cooler Number C08	Arrival temperature was°C							
Cooler Number C08	Arrival temperature was°C							
Cooler Number C08	Arrival temperature wasC							
Communications: Any sample receiving issues with this SDG are fully documented through the email communications which are included as a portion of this SDG Narrative and immediately follow this page. Copies of each of these email communications are also located in the communication section of this datapackage. In addition, any analytical issues pertinent to a given fraction are fully documented by the analyst in the								
associated narrative for the applicable fraction. Comments:								
None.	4 n - 1 . 1 . c .							
Signature: Wu War (M)	N Date: 7/14/08							

Edwards, Meredith D.

From:

Olson, Roxanne

Sent:

Wednesday, June 18, 2008 2:47 PM

To:

Edwards. Meredith D.

Subject:

FW: Region 08 |Case 37402 | Lab DATAC | Issue Multiple | FINAL

Attachments:

2008061810320025.pdf; 37402 CLP IDs.xls





200806181032002537402 CLP IDs.xls .pdf (642 KB) (28 KB)

----Original Message----

From: Kramer, Caroline [mailto:ckramer5@fedcsc.com]

Sent: Wednesday, June 18, 2008 2:24 PM

To: Olson, Roxanne

Cc: beard.carol@epa.gov

Subject: Region 08 | Case 37402 | Lab DATAC | Issue Multiple | FINAL

Roxy,

Summary Start

-Discrepancies with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC. with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC. Resolution 1: Per Region 8, the laboratory will note issue in the SDG Narrative and will use the CLP sample ID provided in the attached table for the DM water and soil samples. The TM water samples will retain the CLP ID listed on the TR/COC.

-Sample listed on TR/COC but not received at laboratory- Issue 2: No sample container was received for DM for sample on TR designated MH25A4. TM container was received. Resolution 2: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

Summary End

Caroline L. Kramer ckramer5@fedcsc.com Computer Sciences Corporation (CSC) 703.818.4248

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----Original Message----

From: Beard.Carol@epamail.epa.gov [mailto:Beard.Carol@epamail.epa.gov]

Sent: Wednesday, June 18, 2008 1:17 PM

To: Kramer, Caroline

Subject: Re: Region 08 | Case 37402 | Lab DATAC | Issue Multiple

Caroline-

Issue 1: Please provide the laboratory with new ID for the different matrices for Case 37402.

Issue 2: Please have the laboratory note this in the case narrative and proceed with the analysis.

Thanks! Carol

"Kramer, Caroline"

<ckramer5@fedcsc</pre>

.com>

Carol Beard/EPR/R8/USEPA/US@EPA

CC

To

06/18/2008 11:06

AΜ

Subject Region 08 | Case 37402 | Lab DATAC

| Issue Multiple

Carol,

DATAC is reporting the follow issues regarding Case 37402 for samples delivered today. TR/COC are attached for reference. Please advise on how the Region wishes the laboratory to proceed.

-Discrepancies with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC.

*Please advise if you would like me to provide new ID for the different matrices. I can do this in a table like last time.

-Sample listed on TR/COC but not received at laboratory- Issue 2: No sample container was received for DM for sample on TR designated MH25A4.
TM container was received.

Please let me know if you have any questions. Thanks,

Caroline L. Kramer ckramer5@fedcsc.com Computer Sciences Corporation (CSC) 703.818.4248

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----Original Message----

From: Olson, Roxanne [mailto:olsonr@datachem.com]

Sent: Wednesday, June 18, 2008 12:40 PM

To: Kramer, Caroline Cc: Edwards, Meredith D.

Subject: Case 37402 Sample Delivery 6/18

Caroline: Here are the TRs for case 37402 for samples we received today and which we spoke about a few minutes ago on the phone.

Issues we see immediately:

TM, DM and Sediment samples all have same EPA IDs. Water containers labels do

differentiate between DM and TM. No container was received for DM for sample on TR designated MH25A4. TM container was received. How do we complete DC-1 forms?

More issues may crop up but we can't begin to address this delivery until we get the first issues taken care of.

Thanks for your help!

Roxy

(See attached file: 2008061810320025.pdf)

Listed TR ID	Matrix	Analysis	New CLP ID
	water	TM	MH2599
MH2599	water (filterd)	DM	MH2662
	soil	ТМ	MH2663
	water	TM	MH25A0
MH25A0	water (filterd)	DM	MH2664
	soil	TM	MH2665
	water	TM	MH25A1
MH25A1	water (filterd)	DM	MH2666
	soil	TM	MH2667
	water	ТМ	MH25A2
MH25A2	water (filterd)	DM	MH2668
	soil	ТМ	MH2669
	water	TM	MH25A3
MH25A3	water (filterd)	DM	MH2670
	soil	TM	MH2671
MH25A6	water	ТМ	MH25A6
IVINZJAD	water (filterd)	DM	MH2672
	water	TM	MH25A7
MH25A7	water (filterd)	DM	MH2673
	soil	ТМ	MH2674
	water	TM	MH25A9
MH25A9	water (filterd)	DM	MH2675
	soil	TM .	MH2676
	water	TM	MH25B0
MH25B0	water (filterd)	DM	MH2677
	soll	TM	MH2678
	water	TM	MH25B1
MH25B1	water (filterd)	DM	MH2679
	soil	TM	MH2680
	water	TM	MH25B2
MH25B2	water (filterd)	DM	MH2681
	soil	ТМ	MH2682
	water	TM	MH25B3
MH25B3	water (filterd)	DM	MH2683
	soil	TM	MH2684
MH25B4	water	ТМ	MH25B4
	water (filterd)	DM	MH2685
	water	TM	MH25B5
MH25B5	water (filterd)	DM	MH2686
	soil	TM	MH2687
	water	TM	MH25B6
MH25B6	water (filterd)	DM	MH2688
. — · · · · · · · · · · · · · · · · · ·	soil	TM	MH2689
	water	TM	MH25B7
MH2587	water (filterd)	DM	MH2690
	soil	TM	MH2691

	 -		
	water	TM	MH25B8
MH25B8	water (filterd)	DM	MH2692
	soil	TM	MH2693
	water	TM	MH25C0
MH25C0	water (filterd)	DM	MH2694
	soil	TM	MH9695
	water	TM	MH25C4
MH25C4	water (filterd)	DM	MH2696
	water	TM	MH25C5
мн25С5	water (filterd)	DM	MH2697
	soil	ТМ	MH2698
	water	ТМ	MH25C7
MH25C7	water (filterd)	DM	MH2699
	soil	TM	MH26A0
	water	TM	MH25C8
MH25C8	water (filterd)	DM	MH26A1
	soil	TM	MH26A2
	water	TM	MH25C9
MH25C9	water (filterd)	DM	MH26A3
<u> </u>		+	
 MH25D1	water	TM	MH25D1
IMIUSONI	water (filterd)	DM	MH26A4
<u> </u>	soil	TM	MH26A5
MH25D3	water	TM	MH25D3
	water (filterd)	DM	MH26A6
	water	TM	MH25D4
MH25D4	water (filterd)	DM	MH26A7
	soil	TM	MH26A8
	water	TM	MH25D5
MH25D5	water (filterd)	DM	MH26A9
	soil	TM	мн26в0
MH25D6	water	TM	MH25D6
	water (filterd)	DM	MH26B1
l -	water	TM	MH25D7
MH25D7	water (filterd)	DM	MH26B2
	soil	TM	MH26B3
MH25D8	water	TM	MH25D8
	water (filterd)	DM	MH25B4
MH25D9	water	TM	MH25D9
101112303	water (filterd)	DM	MH26B5
MH25E0	water	TM	MH25E0
WINZSEU	water (filterd)	DM	MH26B6
MH25E1	water	TM	MH25E1
IAILITAET	water (filterd)	DM	MH26B7
MALIOTEO	water	TM	MH25E2
MH25E2	water (filterd)	DM	MH26B8
14110550	water	TM	MH25E3
MH25E3	water (filterd)	DM	MH26B9
			<u> </u>

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	water	TM	MH25E4
MH25E4	water (filterd)	DM	MH26C0
	soil	TM	MH26C1
i	water	TM	MH25E5
MH25E5	water (filterd)	DM	MH26C2
	soil	TM	МН26С3
	water	TM	MH25E6
MH25E6	water (filterd)	DM:	MH26C4
1	soil	TM	MH26C5
	water	TM	MH25E7
MH25E7	water (filterd)	DM	MH26C6
	soil	TM	MH26C7
	water	TM	MH25E8
MH25E8	water (filterd)	DM	MH26C8
	soil	TM	MH26C9
MH25E9	water	TM	MH25E9
141112363	water (filterd)	DM	MH26D0
MH25F0	water	TM	MH25F0
INITIZOFO	water (filterd)	DM	MH26D1

Edwards, Meredith D.

From: Olson, Roxanne

Sent: Friday, June 20, 2008 9:54 AM

To: Edwards, Meredith D.

Subject: FW: Region 08 |Case 37402 | Lab DATAC | Issue Insufficient volume | FINAL

From: Kramer, Caroline [mailto:ckramer5@fedcsc.com]

Sent: Friday, June 20, 2008 9:46 AM

To: Olson, Roxanne **Cc:** beard.carol@epa.gov

Subject: Region 08 | Case 37402 | Lab DATAC | Issue Insufficient volume | FINAL

Roxy,

Summary Start

Issue: There were no samples designated on the TR/COC for laboratory QC and lab QC is required per scheduling. The laboratory is unable to perform a reduced volume QC on the waters as the samplers delivered the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. Below is a list of the SDG for Case 37402 and the laboratory has indicated which SDG will not have sufficient volume for QC, and where possible selected a sample they would like to use for QC.

MH2599 (TM water) no QC selected as there is not enough volume.

MH25C5 (TM water) no QC selected as there is not enough volume.

MH25E8 (TM water) no QC selected as there is not enough volume.

MH2662 (DM water) no QC selected as there is not enough volume.

MH2697 (DM water) no QC selected as there is not enough volume.

MH26C8 (DM water) no QC selected as there is not enough volume.

MH25F1 (TM soil) selected MH26C9 for QC. MH2663 (TM soil) selected MH2695 for QC

Resolution: Per Region 8, the laboratory's selection of soil QC samples is acceptable. The laboratory will note the volume insufficiency in the SDG Narrative, cancel lab QC on the TM and DM SDG and proceed with the analysis of the samples.

Summary End

Please let me know if you have any questions or problems. Thank you.

Caroline L. Kramer ckramer5@fedcsc.com

Computer Sciences Corporation (CSC)

703.818.4248

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→ 6/20/2008 Phone conversation between Caroline Kramer, SMO, and Carol Beard, Region 8. Carol confirmed that the soil samples selected for QC are acceptable and that DATAC can cancel the QC for the water samples due to insufficient sample volume. The laboratory will note the issue in the SDG Narrative.

From: Kramer, Caroline

Sent: Thursday, June 19, 2008 3:21 PM

To: 'beard.carol@epa.gov'

Subject: Region 08 | Case 37402 | Lab DATAC | Issue Insufficient volume

Carol.

DATAC is reporting the following issue regarding Case 37402. Please advise on how the Region wishes the laboratory to proceed.

Issue: There were no samples designated on the TR/COC for laboratory QC and lab QC is required per scheduling. The laboratory is unable to perform a reduced volume QC on the waters as the samplers delivered the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. Below is a list of the SDG for Case 37402 and the laboratory has indicated which SDG will not have sufficient volume for QC, and where possible selected a sample they would like to use for QC.

MH2599 (TM water) no QC selected as there is not enough volume. MH25C5 (TM water) no QC selected as there is not enough volume. MH25E8 (TM water) no QC selected as there is not enough volume. MH2662 (DM water) no QC selected as there is not enough volume. MH2697 (DM water) no QC selected as there is not enough volume. MH26C8 (DM water) no QC selected as there is not enough volume. MH25F1 (TM soil) selected MH26C9 for QC. MH2663 (TM soil) selected MH2695 for QC

Please let me know if you have any questions or problems. Thank you,

Caroline L. Kramer ckramer5@fedcsc.com Computer Sciences Corporation (CSC) 703.818.4248

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From: Olson, Roxanne [mailto:olsonr@datachem.com]

Sent: Thursday, June 19, 2008 3:04 PM

To: Kramer, Caroline

Subject: FW: Region 8 Case 37402

Caroline: See the following for the SDGs and where possible DATAC's selection for QC. Please note that because this was a confusing login effort we have one SDG (MH2663) that we did not use the lowest alpha numeric number to name the SDG.

Roxy

From: Edwards, Meredith D.

Sent: Thursday, June 19, 2008 12:57 PM

To: DataChem EPA List

Subject: Region 8 Case 37402

Here are the SDG names and then the samples I chose for QC.

MH2599 TM water no QC selected as there is not enough volume.

MH25C5 TM water no QC selected as there is not enough volume.

MH25E8 TM water no QC selected as there is not enough volume.

MH2662 DM water no QC selected as there is not enough volume.

MH2697 DM water no QC selected as there is not enough volume.

MH26C8 DM water no QC selected as there is not enough volume.

MH25F1 TM soil selected MH26C9 for QC.

MH2663 TM soil selected MH2695 for QC also on this SDG I used a higher number to name the SDG. Since there were only 2 samples that didn't change names after receipt it was very confusing.

Thanks

Mere

----Original Message-----From: Kramer, Caroline

Sent: Thursday, June 19, 2008 10:47 AM

To: 'Olson, Roxanne'

Subject: RE: Region 08 | Case 37402 | Lab DATAC | Issue Multiple | FINAL

Roxy,

Just let me know as soon as you know which SDG will not have sufficient volume and I will pass it along to the Region for a resolution.

Please let me know if you have any confusion with the spreadsheet of new sample IDs as you are logging them in. Thanks,

Caroline L. Kramer ckramer5@fedcsc.com Computer Sciences Corporation (CSC) 703.818.4248

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----Original Message-----

From: Olson, Roxanne [mailto:olsonr@datachem.com]

Sent: Thursday, June 19, 2008 10:38 AM

To: Kramer, Caroline

Subject: FW: Region 08 | Case 37402 | Lab DATAC | Issue Multiple | FINAL

Caroline: Another issue with the samples from yesterday as we were logging them in. We have no extra volume for the water samples for QC. Is the case closed or should we expect additional volume from another delivery? We can't even do a reduced volume on the waters as the samplers are delivering the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. I will let you know which SDGs will not have QC as soon as we complete the login.

Roxy

USEPA - CLP COVER PAGE

ab Name: DataChem Laboratories	Contract: EP-W-06-0	<u>54</u>
ab Code: DATAC Case No.: 37402 NRAS	No.: 1554.1 SDG No.	.: <u>MH25C5</u>
OW No.: <u>ILM05.4</u>		
EPA Sample No. MH25C5 MH25C7 MH25C8 MH25C9 MH25D1 MH25D3 MH25D4 MH25D5 MH25D6 MH25D7 MH25D8 MH25D8 MH25D9 MH25E0 MH25E1 MH25E2	Lab Sample 8171020001 8171020002 8171020003 8171020004 8171020005 8171020007 8171020008 8171020009 8171020010 8171020011 8171020012 8171020013 8171020013 8171020014 8171020015	ID
MH25E3 MH25E4 MH25E5 MH25E6 MH25E7	8171020016 8171020017 8171020018 8171020019 8171020020	
	ICP-A	ES ICP-MS
ere ICP-AES and ICP-MS Interelement orrections applied?	(Yes/No) <u>NO</u>	YES
ere ICP-AES and ICP-MS background correctipplied?	ions (Yes/No) <u>NO</u>	<u>NO</u>
If yes - were raw data generated before application of background corrections?	(Yes/No) <u>NO</u>	<u>NO</u>
omments:		

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: Neil Edwards

Date: <u>07/14/2008</u> Title: <u>Chemist</u>



SDG NARRATIVE

Case #: 37402 SDG#: MH25C5

Contract #: EP-W-06-054 DCL Set ID#: 8171020 Modification#: 1554.1

July 14, 2008

General Information

The twenty samples in this SDG were analyzed by methodologies contained in ILM05.4. All concentration, analytical, and method qualifiers are defined in the SOW.

Holding Times

The samples were prepared and analyzed within method required holding times.

Initial and Continuing Calibration

All initial and continuing calibration verification and blank analyses were performed within the designated frequency and recoveries of the verifications and concentrations of the blanks met method acceptance criteria. Mod analytes aluminum fails in the CCV and aluminum and iron fail in the CCB, due to carryover.

ICP-MS Interference Check Sample Analysis

Results for the interference check samples met method acceptance criteria.

Preparation Blanks

The absolute values of all analyte concentrations in the preparation blanks were lower than the Contract Required Quantitation Limits.

Laboratory Control Sample Analysis

Results for the analysis of the water LCS met method acceptance criteria.

Matrix Spike Analysis

A matrix spike was not prepared or analyzed due to insufficient sample volume.

Matrix Duplicate Analysis

A matrix duplicate was not prepared or analyzed due to insufficient sample volume.

ICP-MS Serial Dilution

ICP-MS Serial Dilutions results met method acceptance criteria with the exception of nickel.

Miscellaneous Comments

All calibration data is linear, please see raw data.

Cooler Temps were at 4 and 9 °C.

Issue: Samples were received with the same sample ID for TM and DM. New CLP sample IDs were received for the DM analysis.

Issue: Insufficient sample volumes were received to prepare or analyze matrix spike and matrix spike duplicate samples.

Example Equations

Method HW3:
$$C \times \frac{Vf}{Vi} \times DF = Concentration(\mu g/L)$$

C = Instrument value in $\mu g/L$ (The average of all replicate integrations).

Vf=Final digestion volume (mL) Vi=Initial digestion volume (mL)

DF = Dilution Factor

<u> Tarakki I Kantinga, oʻzi beki i Kangayaya karaya barati barati barati barati baratina ili baratina b</u>

LOPY					MUX 19	54.1		·····	
Lab Name Data	Chem Laboratori	es, Inc.				-	-	Page	of
Received By (Print Nam	e) Mereleth	Eduards						Log-In Date	19108
Received By (Signature)	Maralila	duard							
Case Number 3402				Sample Delive	ry Group No.	UH2505	,	NRAS Numbe	116-
Remarks:		EPA Sample	Aqueou Sample pH	•	Correspo	nding	ned Lab #	Re Condition	marke: in of Sample ment, etc.
Custody Seal (s)	Present/Absent*	M+25A4	47	N/	<u> </u>			Th	woker
	Intact/Broken*	1 37							
2. Custody Seal Nos.	Na	C				श्रमाज्य	וטטן		•
		TX.	3				We		
TrafficReports/ Chain of Custody Records or Packing Lists	Present/Absent*		H				un		· · · · · · · · · · · · · · · · · · ·
4. Airbili	Airbill/Sticker Present/Absent*		55				ols		
			a l				019		
5. Airbili No.	_1/~	MH260		į				DI	n water
			74						
3. Sample Tags	Present/Absent*		me					;	
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody		Aa		·.				
7. Sample Condition	intect/Broken*/ Leaking*		C2		<u>;</u>				
3. Cooler Temperature Indicator Bottle	Present/Absent*		CY						
9. Cooler Temperature	4.								·
10. Does information on custody records, traffic reports, and sample tags agree?	(Yaluno*				·		· 		·
11.Date Received at lab	6/18/18			Su					<u> </u>
2. Time Received	8:16				44de	1			
Sample Transfer	N 5								······································
Fraction A DM	Fraction				 -				
Area # P.36.1	Area # X			<u>.</u>		-			
on (2(18/08)	On	F		1		 		<u> </u>	\
Contact SMO and attac	th research of resolution			I	NAP - TO C	<u></u>			
Reviewed By	Lown	ne le	Dsa	Logbook No.	NOT APPLICA	/RI'E			
Date:	Xopan U	19/10		Logbook Page	No. NOT AP	PLICABLE			,

SAMPLE LOG-IN SHEET Much 1954.1 Lab Name DataChem Laboratories, Inc. Page Log-In Date Received By (Print Name) Received By (Signature) Case Number **NRAS Number** Sample Delivery Group No. 37402 MH2505 nIA Remarks: Aqueous Remarks: Corresponding EPA Sample # Sample Condition of Sample рН Shipment, etc. Sample Tag # Assigned Lab # MH 25 A7 12 MA where 1. Custody Seal (s) Present/Absent Intact/Broken⁴ Ag BO 2. Custody Seal Nos. 3. TrafficReports/ Chain of Custody Records or Packing Present/Absent Lists Airbill/Sticker 4. Airbill Present/Absent 8/7/02/00/2 nla 5. Airbill No. Metals foil FI 6. Sample Tags Present/Algsent MH 2673 Listed on Sample Tag The water LL Numbers Chain-of-Custody Inter/Broken*/. Leaking* 7. Sample Condition 8. Cooler Temperature Present/A65ent* Indicator Bottle 9. Cooler Temperature 10. Does information on custody records, traffic reports, and 85 sample tags agree? 11.Date Received at 80/8/10 Xlo 92 12. Time Received 35 Sample Transfer Fraction Fraction Ву Ву On * Contact SMO and attack record of resolution Reviewed By Logbook No. NOT APPLICABLE

Logbook Page No. NOT APPLICABLE

Date:

Mas						Aud 19	st.1		
Lab Name DataC	hem Laboratori	es, Inc.					·	Page	<u>(</u> of
Received By (Print Name	Illere deth	Edwards						Log-In Date	119/08
Received By (Signature)	Meredith	Lelini	<u> </u>				<u> </u>		
Case Number 374	12	•			Sample Deliv	ery Group No.	H1505	NRAS Num	h /~
Remarks:	· · · · · · · · · · · · · · · · · · ·	EPA	Sample #	Aqueous Sample		Correspor	nding		Remarks: Ition of Sample
	•			pH	San	nple Tag #	Assigned Lab #		Ipment, etc.
1. Custody Seal (s)	Present/Absent*	MH2	599	12	<u> </u>	Na		m	wher
	Intact/Broken*		AD			<u> </u>			
2. Custody Seal Nos.	n		A2						-
`	<u> </u>		A3					-	
TrafficReports/ Chain of Custody Records or Packing									·
Lists	Aresent/Absent*		<u>B2</u>	++-		<u> </u>		 	
4. Airbill	Airbill/Sticker Present/Alsent*		<u>B3</u>	11					
	·		Blo			<u> </u>		ļ	
5. Airbill No.	<u> </u>		EI				8/11020014		
			E2		<u> </u>		1015		<u> </u>
6. Sample Tags	Present/Absent*	Mt 1	2642					DM	Mku
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody		<u>u4</u>						
7. Sample Condition	tract/Broken*/ Leaking*		(0)						
8. Cooler Temperature Indicator Bottle	Present/Absent*		70		4				
9. Cooler Temperature	4.		81			<u> </u>			
10. Does information on custody records, traffic reports, and sample tags agree?	Y@No*		B						
11.Date Received at	ا عاما								
12. Time Received	EK E		88 8 7	11			· · · · · · · · · · · · · · · · · · ·	,	
Sample Transfer	- 21/2		BI						
Fraction DM	Fraction								ŧ
1	Alt (a)				She	4/8/18			
Area # P.33/ By My	Area #		<u> </u>	<u></u>		7410		 	
on ully of	.On		 	+					
* Contact SMO and attack Reviewed By	h record of resolution		(A)	J	Logbook No.	NOT APPLICA	1		
(-	xolan	ne	Elsa	<u>. </u>		NOTAFELIOA			·
Date:	6/19	ne 2/08			Logbook Pag	9 No. NOT APP	PLICABLE	,	

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Lab Name Data C	hem Laboratorio	es, inc							Page	or
Received By (Print Name	") Mereturn	Edura	ds						Log-in Date	19/08
Received By (Signature)										
Case Number 3740					Sample Delive	ery Group No.	WH 25	4	NRAS Numb	er N/V
Remarks: Aqueous Sample # Corresponding									Conditi	emarks: on of Sample
		ا، ۱۵۰	n ~ Λ.	pH / O	i	ple Tag#	As	signed Lab #	<u> </u>	oment, etc.
Custody Seal (s)	Present/Absent* Intact/Broken*		15AL	12	<u> </u>	la	Celas	10 016	1/h	under
			<u></u>				1813	V20008		· · · · · · · · · · · · · · · · · · ·
2. Custody Seal Nos.	N_~		126					USI		 _
3. TrafficReports/			DA					Olo		
Chain of Custody Records or Packing	Presept/Absent*		TR					_oll		•
Lists	Airbill/Sticker									
4, Airbill	Present/Absent*		ED 2					013		
	nl.	· 1	Et Or 10				-	1 020	700	
5. Airbill No.	MP	11/4	12672						<i>VI</i>	n water
			Ag				-			
6. Sample Tags	Present/Absent*		<u>B1</u>			1	 			+
Sample Tag Numbers	dsied/Not Listed on Chain-of-Custody		B2				ļ			<u> </u>
7. Sample Condition	intact/Broken*/ eaking*		184			ľ				
8. Cooler Temperature Indicator Bottle	Present/Absent*		BL							
9. Cooler Temperature	<u>~</u>		Cu					-		
10, Does information on custody records, traffic reports, and sample tags agree?	value.								3	
11.Date Received at	TO IT IN									
12. Time Received	6 K	· ·			Sly	tale				
Sample Transfer						Ceffeld				
Fraction M D M	Fraction									1
Area # 2-33-1	Area # 6/1/									
By Mix	By X									
On VIKIN	On									
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Date:	29 ga 101 [1]	19/0	P		Logbook Page	e No. NOT APP	PLICABLE			

(pla)				·	Mod 15	<u> </u>		
Lab Name DataC	Chem Laboratorio	es, Inc.					Page	_ of
Received By (Print Name	") Meredith	Eduan) (Log-In Date	19/84
Received By (Signature)	Merudil		•			· · · · · · · · · · · · · · · · · · ·	<u> </u>	1.110 8
Case Number		Lewis	UK.		Sample Delivery Group No.	huma	NRAS Number	
Remarks:	<u> </u>		· · · · · · · · · · · · · · · · · · ·	Aqueous		Nut2535	N/A	narks:
	:	EF	PA Sample #	Sample pH	Corres Sample Tag #	pending Assigned Lab #	Condition	of Sample ent, etc.
		MAIL	25 CO	12			-Day	witer
1. Custody Seal (s)	Present/Absent Intact/Broken*	Thus.		+	Na		(1/1)	yy ien = v
	.1		<u> </u>	 				
2. Custody Seal Nos.	- Ma		<u>C7</u>	1		8/1/020002	-	· · · · · · · · · · · · · · · · · · ·
			<u>C8</u>	11		1 002		
TrafficReports/ Chain of Custody Records or Packing			Œ		ļ	l ary		
Lists	Present/Absent* Airbill/Sticker			 			 	
4. Airbill	Present/Absent*		D _	 		005	ļ	
٠.,	·		<u> </u>			olle	<u> </u>	
5. Airbill No.	Ala		E4		·	017		
•			E9	1				
6. Sample Tags	Present/Ab/Sent*	·	FO		:			
Semple Tag Numbers	Listed/Not Listed on Chain-of-Custody	MH	2494				D	n unfu
7. Sample Condition	intect/Broken*/		96					ļ
8. Cooler Temperature Indicator Bottle	Present/Absent*		opp					
9. Cooler Temperature	<u>~~</u> U		AL					
10. Does information on custody records, traffic reports, and	\sim	_	, na					
sample tags agree? 11.Date Received at	(Yest/No*		A3				1	
lab	1/8/09		Au		<u> </u>	_	<u> </u>	
12. Time Received	_815		<u> </u>		, i		-	ļ
Sample Transfer Fraction	Fraction		<u> </u>			_	 	ļ
DN DM	A.		D0				 	
Area # 7 331	Area #		T D					
On Holas	By On				Str	4/8/08		
* Contact SMO and attac	L			<u> </u>	L			
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Date:	Lopan.	119/	P		Logbook Page No. NOT	APPLICABLE		

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME	DataChem Laboratorie	es, Inc.	
CITY/STATE	Salt Lake City, UT	84123	
CASE NO.	37402	SDG NO.:	MH25C5
SDG NOs. TO FOLLOW	N/A		
NRAS No.	N/A		
CONTRACT NO.	EP-W-06-054		•
SOW NO.	ILM05.4		•

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - Exhibit B Section 2.6)

(re	relence - Exhibit b Section 2.07		
		PAGE NOS	CHECK
		FROM TO	LAB REGION
1.	Cover Page	1 1	· · · · · · · · · · · · · · · · · · ·
2.	SDG Narrative		· ——
3,	Sample Log-In Sheet (DC-1)	<u> </u>	
4.	Inventory Sheet (DC-2)	a 10	
5.	Traffic Report/Chain of Custody Record(s)	1 12	
J.,	Inorganic Analysis		
6.	Data Sheet (Form I-IN)	14 33	
7.	Initial & Continuing Calibration	<u>., </u>	
,	Verification (Form IIA-IN)	34 38	✓
8.	CRQL Standard	36 114	
	(Form IIB-IN)	39 46	<u>√</u>
9.	Blanks (Form III-IN)	75kal 42	·——
10.	ICP-AES Interference Check Sample (Form IVA-IN)	NA	· ·
11.	ICP-MS Interference Check Sample		
	(Form IVB-IN)	45 46	✓
12.	Matrix Spike Sample Recovery		
	(Form VA-IN)	MA	✓
13.	Post-Digestion Spike Sample Recovery	1	
	(Form VB-IN)		✓
14.	Duplicates (Form VI-IN)		✓
15.	Laboratory Control Sample	117 107	
	(Form VII-IN)	<u>41 41</u>	<u> </u>
16.	ICP-AES and ICP-MS Serial Dilutions	48 48	1
17.	(Form VIII-IN) Method Detection Limits (Annually) (Form	70 10	
17.	IX-IN)	49 50	✓
18.	ICP-AES Interelement Correction Factors		
	(Quarterly) Form XA-IN)	NA	✓
19.	ICP-AES Interelement Correction Factors		
00	(Quarterly) Form XB-IN)	<u> </u>	
20.	ICP-AES and ICP-MS Linear Ranges	M 51	
21.	(Quarterly) Form XI-IN) Preparation Log (Form XII-IN)	31 31	<u> </u>
	Troportucion mod. (Form VII-IM)	30 0C	

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE	NOs	СНІ	ECK
	FROM	TO	LAB	REGION
22. Analysis Run Log (Form XIII-IN)	57	56	√ .	
23. ICP-MS Tune (Form XIV-IN)	WETGI	58		
24. ICP-MS Internal Standards Relative		· ~		
Intensity Summary (Form XV-IN)	59	<u>68</u>	✓	
25. ICP AES Raw Data	NA		✓	
26. GFAA Raw Data (If Applicable)	MA		✓	
27. ICP-MS Raw Data	69	313	√	
28. Mercury Raw Dta	MA		✓	
29. Cyanide Raw Data	MA		✓	<u> </u>
30. Preparation Logs Raw Data	314	314	✓	
31. Percent Solids Determination Log	NA		1	
32. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments)	315	315	✓	
Sample Tags	316	316	✓	
Sample Log-In Sheet (Lab)	NA		✓	
33. Misc. Shipping/Receiving Records				
(list all individual records)	n (A			
Telephone Logs	NA		✓	
DCL CRIR	NA		<u> </u>	
DCL SDG TR Cover Sheet	_ 317	317	✓	
34. Internal Lab Sample Transfer Records and				
Tracking Sheets (describe or list)				
DCL Work Order	_ <u>NH</u>		✓	
DCL COC	<u> 318</u>	39	✓	
35. Internal Original Sample Prep &		•		
Analysis Records (describe or list)		314 7		
And Records	_ 370_	397	√	
Prep Analysis Records	_ 345	35]	✓	
Description	NA	<u> </u>	<u> </u>	
36. Other Records (describe or list)	۱۸	,		
Telephone Communications Log	MIT		<u> </u>	
E-mail Communications	352	361	✓	
			✓	
37. Comments: Note Hell & Halysis	got switch	ecl		·
		 		
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Completed by: (CLP Lab) Will Waruff	Tulda Wanath / Das	On in 1	77 /1 4	/ 00
	Julie Warath / Doc (Print Name & Titl		$-\frac{7/14}{\sqrt{22+4}}$	
(Signature) Audited By:	frithe Name & Titl	- /	(Date	= 1
(USEPA)	•			
(Signature)	(Print Name & Titl	<u> </u>	- Insti	
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USEPA Contract Laboratory Program Inorganic Traffic Report & Chain of Custody Record

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37402

No: MHUSOC

e No:

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Sampler **Chain of Custody Record** Date Shipped: For Lab Use Only 6/16/2008 Signature EPMO 6054 **Carrier Name:** Hand delivered (Date / Time) Relinquished By Received By (Date / Time) Lab Contract No: Airbill: **Unit Price:** Shipped to: Datachem Laboratories. Transfer To: 960 West LeVoy Drive Salt Lake City UT 84123 3 Lab Contract No: (801) 266-7700 Unit Price

	 						Uni	Price:	
	INORGANIC SAMPLE No.	MATRIX/ Sampler	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
	MH25C5	Surface Water/ Sediment	/Ģ	DM (21), TM (21)	91, 92, 93 (3)	Silver Creek upstream of Dority Springs	S: 6/5/2008 10:	20	
(Cartes State			01, 00, 00 (S)	Charles Circle below			
	MH25C7	Surface Water/ Sediment	/G	DM (21), TM (21)	97, 98, 99 (3)	Silver Creek above Prospector Square	S: 6/5/2008 10:	50	M.
	MH25C8	Surface Water/ Sediment	/G	DM (21), TM (21)	100, 101, 102 (3)	Silver Creek downstream of Ontario	S: 6/5/2008 12:	55	
	MH25C9	Surface Water	/G	DM (21), TM (21)	1 03-104, 105 (3) (2)	Canyon Silver Creek above Ontario Canyon	S: 6/5/2008 13:	20	***
	MUSEDO	Surf-Water	ج	<u> </u>		Cilma Omedy			
	MH25D1	Surface Water/	/G	DM (21), TM (21)	109, 110, 111 (3)	Ontario Canyon below Ontario Drain Tunnel 2	S: 6/5/2008 14:	50	
	- Lineare	a de la late r	•	DM (04), TM (04)	110 110 111 (0)	Manufació Catacia Cario Jimmatio			·
	MH25D3	Surface Water	/G	DM (21), TM (21)	1 15, 116, 117 (3) (z)	Ontario Canyon above Empire Canyon	S: 6/5/2008 14:	00	
	MH25D4	Surface Water/ Sediment	/G	DM (21), TM (21)	118, 119, 120 (3)	Mouth of Empire Canyon	S: 6/5/2008 15:	00	

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:		Cooler Temperature Upon Receipt: 44444	Chain of Custody Seal Number:		
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	1111	Custody Seal Intact? Shipment Iced?		
DM = CLP TAL Dissolve	ed Metals, TM = CLP TAL Total Metals					

TR Number: 8-584325316-061608-0001

LABORATORY COPY



USEPA Contract Laboratory Program Inorganic Traffic Report & Chain of Custody Record

Case No	37402		_		 	-
DAS No:					ı	
SDG No:	MULTER C			,	,	_

			Man ISSI.	SUS NO. MAY	<i>9</i> 50ξ
Date Shipped:	6/16/2008	Chain of Custody Record	Sampler Signature:	For Lab Use On	. •
Carrier Name: Airbill:	Hand delivered	Relinquished By (Date / Time)	Received By (Date / Time)	Lab Contract No:	EAND GOST
Shipped to:	Datachem Laboratories.	10 Hay	Merody till 418/0/815	Unit Price:	ala
	Inc. 960 West LeVoy Drive	2	(17)	Transfer To:	M.
	Salt Lake City UT 84123 (801) 266-7700	3		Lab Contract No:	ALK OF THE PROPERTY OF THE PRO
	(001) 200-1700	4		Unit Price:	

_							J		
	INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
-	MH25D5	Surface Water/ Sediment	/G	DM (21), TM (21)	121, 122, 123 (3)	Mouth of Walker & Webster Gulch	S: 6/6/2008 11:00		to the state of th
	MH25D6	Surface Water	/G	DM (21), ТМ (21)	124, 1<u>25</u>, 128 (3) (こ)	Mouth of Anchor Tunnel	S: 6/6/2008 9:50		
	MH25D7	Surface Water/	/G	DM (21), TM (21)	127, 128, 129 (3)	Upstream of Anchor Tunnel	S: 6/6/2008 10:30		
	MH25D8	Ground Water	/G	DM (21), TM (21)	130, 13 <u>1</u> (2)	Transect 1	S: 6/4/2008 18:55		A CONTRACTOR OF THE CONTRACTOR
	MH25D9	Ground Water	/G	DM (21), TM (21)	132, 133 (2)	Transect 2	S: 6/4/2008 17:43		***
	MH25E0	Ground Water	/G	DM (21), TM (21)	134, 135 (2)	Transect 3	S: 6/4/2008 17:08		
	MH25E1	Ground Water	/G	DM (21), TM (21)	136, 137 (2)	Transect 5	S: 6/3/2008 15:00		
	MH25E2	Ground Water	/G	DM (21), TM (21)	138, 139 (2)	Transect 6	S: 6/3/2008 12:55		•
	MH25E3	Ground Water	/G	DM (21), TM (21)	140, 141 (2)	P2-5	S: 6/3/2008 10:57		
	MH25E4	Surface Water/	/G	DM (21), TM (21)	142, 143, 144 (3)	SC-SW-33	S: 6/5/2008 10:54		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4444449	Chain of Custody Seal Number:		
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? N Shipment Iced?		
DM = CLP TAL Dissolve	ed Metals, TM = CLP TAL Total Metals			A VI		

LABORATORY COPY



USEPA Contract Laboratory Program Inorganic Traffic Report & Chain of Custody Record

Case No:	37402	•	_	-		_	 -
DAS No:						1	
SDG No:	MUZCOS					L	•

				WAL 1554.1		1/0	11505
Date Shipped: Carrier Name:	6/16/2008	Chain of Custody	Record	Sampler Signature:	Ary	For Lab Use O	nlý
Carner Name: Airbill:	Hand delivered	Relinquished By	(Date / Time)	Received By	/ (Date / Time)	Lab Contract No:	EMAD 100SY
Shipped to:	Datachem Laboratories.	1 Chan #7	6/18/08	Mered Edin	il ulistists	Unit Price:	Ma
omphoe io.	Inc.	2		G/	(-()	Transfer To:	Ale .
	960 West LeVoy Drive Salt Lake City UT 84123 (801) 266-7700	3	,			Lab Contract No:	AIKION
	(801) 280-7700	4				Unit Price:	

INORGANIC SAMPLE No.	MATRIX/ Sampler	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE CO		ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
MH25E5	Surface Water/ Sediment	/G	DM (21), TM (21)	145, 146, 147 (3)	SC-SW-40-1	S: 6/5/2008	14:30		
MH25E6	Surface Water/ Sediment	/G	DM (21), TM (21)	148, 149, 150 (3)	SC-SW-40-1	S: 6/5/2008	14:37	•	M.
MH25E7	Surface Water/	/G	DM (21), TM (21)	151, 152, 153 (3)	SC-SW-43	S: 6/6/2008	10:34		My May W
MH25E8	Surface Water/	/G	DM (21), TM (21)	154, 155, 156 (3)	SC-SW-44	S: 6/5/2008	18:45		
MH25E9	Surface Water	/G	DM (21), TM (21)	157, 158, 150 (3) (>)	SC-SW-OPP1	S: 6/5/2008	8:07	÷	• :
MH25F0	Surface Water	/Ġ	DM (21), TM (21)	1 60, 181, 162 (3) (2)	SC-SW-OPP2	S: 6/5/2008	15:40		ì
MHZ5F1	Sediment		TM(z	n (i)	5 (-54-20				

-	Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 444444	Chain of Custody Seal Number:
	Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	- 11111	Custody Seal Intact? A Shipment Iced?
	DM = CLP TAL Dissolve	d Metals, TM = CLP TAL Total Metals			

LABORATORY CO

TARGET SHEET

EPA REGION VIII SUPERFUND DOCUMENT MANAGEMENT SYSTEM

DOCUMENT NUMBER: 1085976

SITE NAME:	RICHARDSON FLAT TAILINGS		
DOCUMENT DATE:	09/11/2008		
Due to one of the fo	DOCUMENT NOT SCANNED llowing reasons:		
☐ PHOTOGRAPHS			
☐ 3-DIMENSIONAL	- -		
OVERSIZED			
☐ AUDIO/VISUAL			
□ PERMANENTLY	BOUND DOCUMENTS		
☐ POOR LEGIBILIT	ΓΥ		
☑ OTHER			
☐ NOT AVAILABLE	≣		
	TYPES OF DOCUMENTS NOT TO BE SCANNED (Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody)		
DOCUMENT DESCR	RIPTION:		
1 - 3 1/2" Floppy #EP-W-06-054, (- File Name MH25C5.IO1 and IO2, Contract Case/SDG 37402/MH25C5, 7/14/08		